

Amendments to the Claims:

1. (Currently Amended) A chip for a chip-containing portable article comprising:

a monocrystalline silicon substrate layer having an active face with
circuits integrated therein defining a central processor unit and
memories; and

an additional layer of monocrystalline silicon that:

is sealed bonded to the active face of the monocrystalline silicon
substrate layer by a sealing bonding layer;

covers at least part of said active face; and

comprises physical means for providing physical protection
against the action of electromagnetic radiation in the
infrared range at a wavelength longer than 1 μm .

2. (Withdrawn)

3. (Withdrawn)

4. (Cancelled)

5. (Previously Presented) A chip according to Claim 1, wherein the physical means
for providing physical protection against the action of electromagnetic radiation
are silicon dopants.

6. (Previously Presented) A chip according to Claim 5, wherein the concentration
of silicon dopants lies in the range 10^{17} to 10^{20} atoms per cm^3 .

7. (Previously Presented) A chip according to Claim 5, wherein the silicon dopants
are phosphorus or boron.

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) A chip according to Claim 1, wherein the physical means for providing physical protection against the action of electromagnetic radiation are formed by surface irregularities.
11. (Cancelled)
12. (Currently Amended) A chip according to claim 10, wherein the surfaces irregularities are provided in the face of the additional layer of monocrystalline silicon that is in contact with the sealing bonding layer.
13. (Currently Amended) A chip according to Claim 10, wherein the surface irregularities are provided in the face of the additional layer of monocrystalline silicon that is opposite to the face that is in contact with the sealing bonding layer.
14. (Currently Amended) A chip according to Claim 1, wherein the physical means for providing physical protection against the action of electromagnetic radiation are formed by at least one deposition of metal on the additional layer of monocrystalline silicon.
15. (Previously Presented) A chip according to Claim 14, wherein the metal deposition has a thickness greater than 50 Å.
16. (Currently Amended) A chip according to Claim 14, wherein the metal deposition is on the face of the additional of monocrystalline silicon that is in contact with the sealing bonding layer.
17. (Currently Amended) A chip according to Claim 14, wherein the metal deposition is on the face of the additional layer of monocrystalline silicon that is opposite to the face that is in contact with the sealing bonding layer.
18. (Cancelled)

19. (Previously Presented) A chip according to claim 16, wherein the metal deposition has a thickness of about 100 Å.
20. (Currently Amended) A portable article provided with a chip comprising:
- a monocrystalline silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and
 - an additional layer of monocrystalline silicon that:
 - is sealed bonded to the active face of the monocrystalline silicon substrate layer by a sealing bonding layer;
 - covers at least part of said active face; and
 - comprises physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1 μm.
21. (currently amended) The chip according to Claim 5 wherein the silicon substrate layer comprises:
- physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1 μm; and
 - wherein said physical means comprises silicon dopants in the face of the monocrystalline silicon substrate layer that is opposite to the active face.
22. (Currently Amended) The chip according to Claim 21, wherein the concentration of silicon dopants in the monocrystalline silicon substrate layer lies in the range 10^{17} to 10^{20} atoms per cm^3 .

23. (Currently Amended) The chip according to Claim 22, wherein the silicon dopants in the monocrystalline silicon substrate layer are phosphorus or boron.
24. (Currently Amended) A chip according to Claim 10 wherein the monocrystalline silicon substrate layer comprises:
- physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1 μm ; and
- wherein said physical means comprises surface irregularities in the face of the monocrystalline silicon substrate layer that is opposite to the active face.
25. (Currently Amended) A chip according to Claim 14 wherein the monocrystalline silicon substrate layer comprises:
- physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1 μm ; and
- wherein said physical means comprising deposition of metal on the face of the monocrystalline silicon substrate layer that is opposite to the active face.
26. (Currently Amended) A chip for a chip-containing portable article comprising:
- a monocrystalline silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and
- physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1 μm comprising silicon dopants in the face of the

monocrystalline silicon substrate layer that is opposite to the active face.

27. (Previously Presented) A chip according to Claim 26, wherein the concentration of silicon dopants lies in the range 10^{17} to 10^{20} atoms per cm^3 .

28. (Previously Presented) A chip according to Claim 27, wherein the silicon dopants are phosphorus or boron.

29. (Currently Amended) A chip for a chip-containing portable article comprising:

a monocrystalline silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and

physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than $1\ \mu\text{m}$ comprising surface irregularities in the face of the monocrystalline silicon substrate layer that is opposite to the active face.

30. (Currently Amended) A chip for a chip-containing portable article comprising:

a monocrystalline silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and

physical means for providing physical protection against the electromagnetic radiation in the infrared range at a wavelength longer than $1\ \mu\text{m}$ comprising deposition of metal on the face of the monocrystalline silicon substrate layer that is opposite to the active face.

31. (Previously Presented) A chip according to Claim 30, wherein the metal deposition has a thickness greater than $50\ \text{\AA}$.

32. (Previously Presented) A chip according to claim 30, wherein the metal deposition has a thickness of about 100 Å.